CHICAGO ELECTRIC® POWER TOOLS 18V CORDLESS 1/2" IMPACT WRENCH

Model 67845

SET UP AND OPERATING INSTRUCTIONS



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Read this material before using this product. Failure to do so can result in serious injury. SAVE THIS MANUAL.

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For technical questions or replacement parts, please call 1-800-444-3353.

CONTENTS

IMPORTANT SAFETY INFORMATION3 GENERAL POWER TOOL SAFETY WARNINGS3
IMPACT WRENCH SAFETY WARNINGS5
VIBRATION SAFETY
GROUNDING7
DOUBLE INSULATED TOOLS: TOOLS WITH TWO PRONG PLUGS 7
EXTENSION CORDS
SYMBOLOGY7
SPECIFICATIONS8
UNPACKING8
INSTRUCTIONS FOR PUTTING INTO USE8
FUNCTIONS
OPERATING INSTRUCTIONS8
TOOL SET UP
CHARGING THE BATTERY PACK 9 WORK PIECE AND WORK AREA
SET UP
GENERAL OPERATING INSTRUCTIONS
MAINTENANCE AND SERVICING 11 CLEANING, MAINTENANCE, AND
LUBRICATION11 TROUBLESHOOTING11
PARTS LIST12
ASSEMBLY DIAGRAM13
LIMITED 90 DAY WARRANTY14

SAVE THIS MANUAL

Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.

IMPORTANT SAFETY INFORMATION

In this manual, on the labeling, and all other information provided with this product:



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER indicates a **A DANGER** hazardous situation which, if not avoided, will result in death or serious injury.

WARNING indicates a **AWARNING** hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION, used with **ACAUTION** the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to personal injury.

CAUTION

CAUTION, without the safety alert symbol, is used to address practices not related to personal injury.

General Power Tool Safety Warnings



WARNING Read all safety warnings and instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious iniurv.

Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

- 1. Work area safety
 - a. Keep work area clean and well lit. Cluttered or dark areas invite accidents.
 - b. Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
 - c. Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.
- 2. **Electrical safety**

Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.

- 3. Personal safety
 - a. Stay alert, watch what you are doing and use common sense when

- operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- b. Use personal protective equipment.
 Always wear eye protection. Safety equipment such as dust mask, nonskid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c. Prevent unintentional starting.
 Ensure the switch is in the offposition before connecting to power
 source and/or battery pack, picking
 up or carrying the tool. Carrying
 power tools with your finger on the
 switch or energizing power tools that
 have the switch on invites accidents.
- d. Remove any adjusting key or wrench before turning the power tool on.
 A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- e. Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- f. Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.
- g. If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of these devices can reduce dust-related hazards.
- h. Only use safety equipment that has been approved by an appropriate standards agency. *Unapproved*

- safety equipment may not provide adequate protection. Eye protection must be ANSI-approved and breathing protection must be NIOSH-approved for the specific hazards in the work area.
- 4. Power tool use and care
 - a. Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
 - b. Do not use the power tool if the switch does not turn it on and off.

 Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
 - c. Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
 - d. Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
 - e. Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
 - f. Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of

the power tool for operations different from those intended could result in a hazardous situation.

- 5. Battery tool use and care
 - a. Recharge only with the charger specified by the manufacturer. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
 - b. Use power tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
 - c. When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.
 - d. Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.

6. Service

a. Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

Impact Wrench Safety Warnings

 Maintain labels and nameplates on the tool. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.

- 2. Avoid unintentional starting. Prepare to begin work before turning on the tool.
- Do not lay the tool down until it has come to a complete stop. Moving parts can grab the surface and pull the tool out of your control.
- 4. When using a handheld power tool, maintain a firm grip on the tool with both hands to resist starting torque.
- 5. The battery charger gets hot during use. The charger's heat can build up to unsafe levels and create a fire hazard if it does not receive adequate ventilation, due to an electrical fault, or if it is used in a hot environment. Do not place the charger on a flammable surface. Do not obstruct any vents on the charger. Especially avoid placing the charger on carpets and rugs; they are not only flammable, but they also obstruct vents under the charger. Place the charger on a stable, solid, nonflammable surface (such as a stable metal workbench or concrete floor) at least 1 foot away from all flammable objects, such as drapes or walls. Keep a fire extinguisher and a smoke detector in the area. Frequently monitor the charger and battery while charging.
- 6. This product is not a toy. Keep it out of reach of children.
- 7. People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure. In addition, people with pacemakers should:
 - Avoid operating alone.
 - Do not use with power switch locked on.
 - Properly maintain and inspect to avoid

electrical shock.

- Any power cord must be properly grounded. Ground Fault Circuit Interrupter (GFCI) should also be implemented it prevents sustained electrical shock.
- 8. WARNING: Some dust created by power sanding, sawing, grinding, drilling, and other construction activities, contains chemicals known [to the State of California] to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:
 - Lead from lead-based paints
 - Crystalline silica from bricks and cement or other masonry products
 - Arsenic and chromium from chemically treated lumber

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles. (California Health & Safety Code § 25249.5, et seq.)

- 9. WARNING: Handling the Battery
 Charger cord on this product will expose
 you to lead, a chemical known to the
 State of California to cause cancer, and
 birth defects or other reproductive harm.
 Wash hands after handling. (California
 Health & Safety Code § 25249.5, et seq.)
- 10. The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

Vibration Safety

This tool vibrates during use. Repeated or long-term exposure to vibration may cause temporary or permanent physical injury, particularly to the hands, arms and shoulders. To reduce the risk of vibration-related injury:

- Anyone using vibrating tools regularly 1. or for an extended period should first be examined by a doctor and then have regular medical check-ups to ensure medical problems are not being caused or worsened from use. Pregnant women or people who have impaired blood circulation to the hand, past hand injuries, nervous system disorders, diabetes, or Raynaud's Disease should not use this tool. If you feel any symptoms related to vibration (such as tingling, numbness, and white or blue fingers), seek medical advice as soon as possible.
- Do not smoke during use. Nicotine reduces the blood supply to the hands and fingers, increasing the risk of vibration-related injury.
- 3. Wear suitable gloves to reduce the vibration effects on the user.
- 4. Use tools with the lowest vibration when there is a choice.
- Include vibration-free periods each day of work.
- Grip tool as lightly as possible (while still keeping safe control of it). Let the tool do the work.
- 7. To reduce vibration, maintain the tool as explained in this manual. If any abnormal vibration occurs, stop use immediately.



GROUNDING

AWARNING

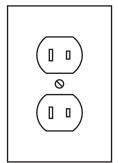
TO PREVENT ELECTRIC SHOCK

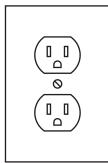
AND DEATH FROM INCORRECT GROUNDING WIRE CONNECTION:



Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. Do not modify the power cord plug provided with the tool. Never remove the grounding prong from the plug. Do not use the tool if the power cord or plug is damaged. If damaged, have it repaired by a service facility before use. If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.

Double Insulated Tools: Tools with Two Prong Plugs





Outlets for 2-Prong Plug

 Battery Chargers marked "Double Insulated" do not require grounding. They have a special double insulation system which satisfies OSHA requirements and complies with the applicable standards of Underwriters Laboratories, Inc., the Canadian

- Standard Association, and the National Electrical Code.
- Double insulated tools may be used in either of the 120 volt outlets shown in the preceding illustration. (See Outlets for 2-Prong Plug.)

Extension Cords

Note: Extension cords must not be used with this item's charger.

Symbology

	Double Insulated
	Canadian Standards Association
ſĴĹ	Underwriters Laboratories, Inc.
V~	Volts Alternating Current
Α	Amperes
n ₀ xxxx/min.	No Load Revolutions per Minute (RPM)

SPECIFICATIONS

Battery Pack	18 V / NiCd / 1700 mAh
Speed	0 - 2,100 RPM / 3,000 BPM (No Load)
Average Torque	205 ft-lbs Forward (clockwise) 211 ft-lbs Reverse (counterclockwise)
Drive	1/2" Square Drive
Bolt Capacity	1/2" (13 mm)

UNPACKING

When unpacking, make sure that the item is intact and undamaged. If any parts are missing or broken, please call Harbor Freight Tools at 1-800-444-3353 as soon as possible.

INSTRUCTIONS FOR PUTTING INTO USE



Read the ENTIRE IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

AWARNING

TO PREVENT SERIOUS INJURY

FROM ACCIDENTAL OPERATION:

Turn the Power Switch of the tool off and unplug the tool from its electrical outlet before assembling or making any adjustments to the tool.

Note: For additional information regarding the parts listed in the following pages, refer to the Assembly Diagram near the end of this manual.

Functions



OPERATING INSTRUCTIONS



Read the ENTIRE IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

Tool Set Up

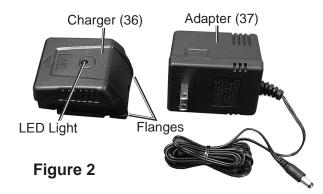


TO PREVENT SERIOUS INJURY

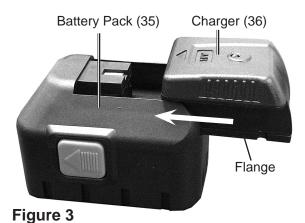
FROM ACCIDENTAL OPERATION:

Turn the Power Switch of the tool off and unplug the tool from its electrical outlet before adjusting tool or installing accessories.

Charging the Battery Pack



1. Plug the Adapter (37) into a 120V wall outlet.



2. Align the flanges on the Charger (36) with the slots on the Battery Pack (35) and slide the Charger onto the Battery Pack.



3. Plug the Adapter cord into the Charger. The light on the Charger will turn on, indicating that the Battery Pack is Charging.

- 4. Charge for 2-1/2 to 3 hours, then unplug the Adapter from the wall and the Charger, and remove the Charger from the Battery Pack.
- 5. Allow the components to cool if they are warm or hot to the touch. Store the Adapter and Charger in the Storage Case (38).

CAUTION: Do not leave the Battery Pack charging for more than 5 hours or the Battery Pack may become damaged.

Note: Initial charge and recharging is approximately the same amount of time.

Work Piece and Work Area Set Up

- Designate a work area that is clean and well-lit. The work area must not allow access by children or pets to prevent distraction and injury.
- Secure loose work pieces using a vise or clamps (not included) to prevent movement while working.
- 3. There must not be objects, such as utility lines, nearby that will present a hazard while working.

General Operating Instructions

- Only use sockets designed for impact wrench use.
- Do not use sockets with drives smaller than 1/2". You may use impact socket adapters to use impact sockets with drives greater than 1/2".
- Do not exceed recommended bolt capacity of 1/2"
- Only use socket extensions designed for impact use.
- To lock the Trigger (27), center the Forward/Reverse Lever (26) on the tool.

- To set the Impact Anvil (6) to turn forward (clockwise), press the right side of the Forward/Reverse Lever (26) until it clicks into place.
- To set the Impact Anvil (6) to turn in Reverse (counterclockwise), press the left side of the Forward/Reverse Lever (26) until it clicks into place.
- **CAUTION:** To prevent possible gear damage, always allow the Impact Anvil (6) to come to a complete stop before changing the direction of rotation.

Basic Operation

- 1. Charge the Battery Pack, but do not attach it to the Impact Wrench yet.
- 2. Center the Forward/Reverse Lever (26) to lock the Trigger (27).
- 3. Slide the desired socket (sold separately) onto the Impact Anvil (6).

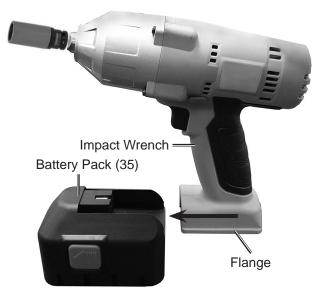


Figure 5

4. Align the flanges on the bottom of the Impact Wrench with the slots on the Battery Pack (35), and slide the Impact Wrench onto the Battery Pack.

- 5. Set the desired direction of the Impact Anvil (6) with the Forward/Reverse Lever (26).
- 6. Position the socket over the fastener.
- 7. Holding the handle firmly with one hand and the top of the Housing (24 & 28) with your other hand, gently squeeze the Trigger (27).

Note: This tool has a variable speed and torque. Squeezing the Trigger more tightly will increase the speed and torque of the tool.

- 8. After tightening a fastener, check the torque with a torque wrench to make sure the fastener is secure.
- 9. When finished using the Impact Wrench, center the Forward/Reverse Lever (26).
- To remove the Battery Pack (35), press in on both buttons on the side of the Battery Pack and slide the Impact Wrench off of the Battery Pack.
- 11. Store the tool and Battery Pack (35) in it's Storage Case (38), away from children.

"Breaking Loose" Fasteners

To loosen a fastener which has become "frozen", typically due to corrosion:

- Spray silicon or another appropriate lubricant (sold separately) on the fastener and allow it to sit for 15-30 minutes.
- 2. Position the socket over the fastener, then operate the Impact Wrench for short intervals, first in one direction, then the other direction to loosen the bolt. Be sure to let the Impact Anvil (6) come to a compete stop, before changing the direction of rotation.

MAINTENANCE AND SERVICING



Procedures not specifically explained in this manual must be performed only by a qualified technician.

AWARNING

TO PREVENT SERIOUS INJURY

FROM ACCIDENTAL OPERATION:

Turn the Power Switch of the tool off and unplug the tool from its electrical outlet before performing any inspection, maintenance, or cleaning procedures.

TO PREVENT SERIOUS INJURY FROM TOOL FAILURE:

Do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.

Cleaning, Maintenance, and Lubrication

- BEFORE EACH USE, inspect the general condition of the tool. Check for loose hardware, misalignment or binding of moving parts, cracked or broken parts, damaged electrical wiring, and any other condition that may affect its safe operation.
- 2. **AFTER USE,** wipe external surfaces of the tool with clean cloth.
- Periodically have the carbon brushes replaced by a qualified technician as needed.
- NiCd BATTERY MUST BE RECYCLED OR DISPOSED OF PROPERLY. Do not short, incinerate or open battery.
- 5. AWARNING! If the supply cord of this power tool is damaged, it must be replaced only by a qualified service technician.

Troubleshooting

Problem	Possible Causes	Likely Solutions
Tool will not start.	Battery Pack not charged.	Charge the Battery Pack.
	Internal damage or wear. (Carbon brushes or switch, for example.)	2. Have technician service tool.
Performance	Carbon brushes worn or damaged.	Have qualified technician replace brushes.
decreases over time.		
Excessive noise or	Internal damage or wear. (Carbon	Have technician service tool.
rattling.	brushes or bearings, for example.)	
Overheating.	Forcing tool to work too fast.	Allow tool to work at its own rate.
	2. Socket misaligned.	2. Check and correct socket placement on tool.
	3. Blocked motor housing vents.	3. Wear ANSI-approved safety goggles and NIOSH- approved dust mask/respirator while blowing dust out of motor using compressed air.



Follow all safety precautions whenever diagnosing or servicing the tool. Disconnect power supply before service.

PLEASE READ THE FOLLOWING CAREFULLY

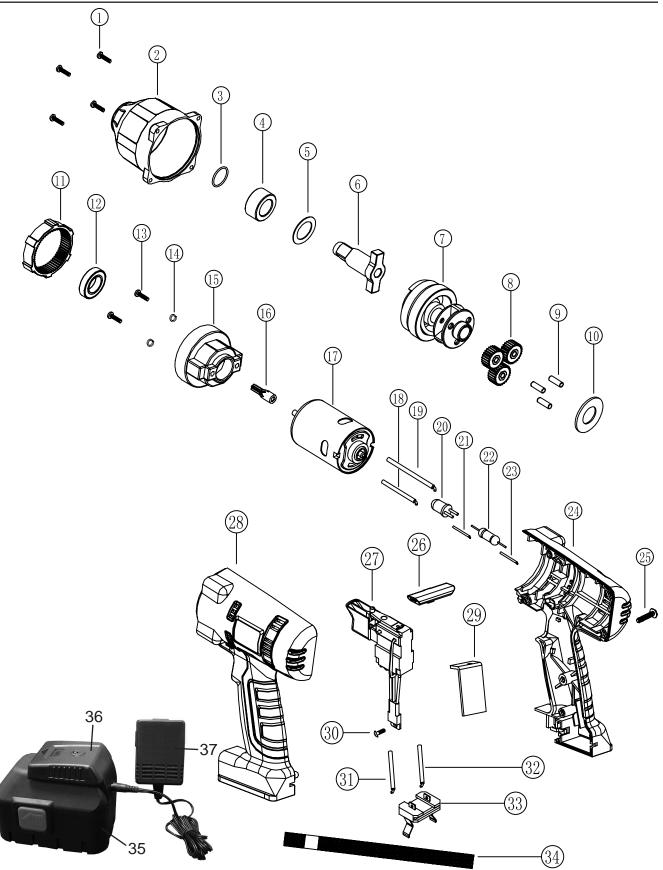
THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO.

PARTS LIST

Part	Description	Qty
1	Screw M4 x 25	4
2	Impact Cap	1
3	Felt Washer	1
4	Needle Bearing HKH1816	1
5	Plastic Washer	1
6	Impact Anvil	1
7	Impact Block Assembly	1
8	Planetary Gear	3
9	Pin Ø5 x 15.6	3
10	Flat Washer	1
11	Ring Gear	1
12	Ball Bearing 6003zz	1
13	Screw M5 x 10	2
14	Lock Washer	2
15	Ring Gear Case	1
16	Motor Pinion	1
17	Motor	1
18	Electric Wire (115mm, 16 awg)	1
19	Electric Wire (115mm, 16 awg)	1

Part	Description	Qty
20	LED Lamp	1
21	Electric Wire (40mm, 24 awg)	1 1
22	Resistor	1 1
23	Electric Wire (90mm)	1 1
24	Housing (Right)	1 1
25	Screw M3 x 14	7
26	Forward/Reverse Lever	1
27	Trigger	1
28	Housing (Left)	1
29	Spacer	1
30	Screw M3.5 x 7	1
31	Electric Wire (115mm, 16 awg)	1
32	Electric Wire (115mm, 16 awg)	1
33	Terminal	1
34	Strap	1
35	Battery Pack	1
36	Charger	1
37	Adapter	1
38	Storage Case (not shown)	1

ASSEMBLY DIAGRAM



LIMITED 90 DAY WARRANTY

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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Record Product's Serial Number Here:	

Note: If product has no serial number, record month and year of purchase instead.

Note: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.